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AF/2826

Attorney's Docket No.: 10417-103001 / F51-139075M/SW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Eiji Nishibe et al.
Serial No. : 10/007,384
Filed : October 22, 2001
Title : SEMICONDUCTOR DEVICE AND MANUFACTURING METHOD THEREOF

Art Unit : 2826
Examiner : Tan N. Tran

MAIL STOP AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY TO ACTION OF SEPTEMBER 30, 2003

In reply to the Final Office Action of September 30, 2003, Applicant submits the following remarks.

Claims 1-4 and 9 are pending.

The Applicants note that a recent Information Disclosure Statement has been filed in a separate mailing.

Submitted herewith is a declaration of Eiji Nishibe under 37 C.F.R. 1.132 in support of the Applicants argument of non-obviousness of the claimed invention. Mr. Nishibe, having a Master of Material Science Degree, concludes that "the process disclosed in [the Malhi reference] will not result in the claimed structure of the present application. In particular, the Malhi patent will result in a structure as illustrated in FIG. 9, which is the prior art." Decl. of Nishibe par. 12.

The declaration describes the conventional local oxidation of silicon (LOCOS) process and concludes that the conventional LOCOS process will result in a structure where the first gate insulating layer will extend lower than the second gate insulating layer (Decl. of Nishibe pars. 7

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

January 30, 2004
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and 8). The declaration then points to the process of the Malhi patent to show that the process disclosed is the conventional LOCOS process and will, therefore, result in the first gate insulating layer extending lower than the second gate insulating layer Decl. of Nishibe par. 9). Thus, FIG. 1 of Malhi, as referenced in the Office Action, does not illustrate the result of the process disclosed in the Malhi patent.

The present process differs from the conventional process for forming the first gate insulating film. As recited in claim 1, an insulating film is formed on the entire surface of the substrate, and the first gate insulating film is patterned to form the shape of the desired resultant first gate insulating film. This change in the process will result in the a first gate insulating film that does not extend lower than the second gate insulating film.

The Applicants respectfully request withdrawal of the 35 U.S.C. 102 rejection because the process of the Malhi patent does not teach how to obtain the structure of Fig. 1 and, therefore, does not enable that structure. Thus, the Mahi patent does not result in the structure recited in claims 1 and 9.

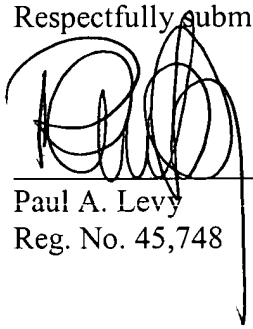
Claims 2-4 depend from claim 1 and should be allowable for at least the same reasons

Conclusion

Applicants respectfully request allowance of all pending claims.

Enclosed is a $110 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,



Date: January 30, 2004

Paul A. Levy
Reg. No. 45,748

Fish & Richardson P.C.
45 Rockefeller Plaza, Suite 2800
New York, New York 10111
Telephone: (212) 765-5070
Facsimile: (212) 258-2291

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